

U.S. Ser. No. 10/761,400
Applicants: Kazuhiko Ohnishi et al.
Amendment in Response to the Notice
of Non-Compliant Amendment (37 CFR 1.121)
dated March 15, 2007 and the Office Action
dated November 16, 2006

Listing of the Claims

Claim 1 (Canceled)

Claim 2 (Canceled)

Claim 3 (Canceled)

Claim 4 (Canceled)

Claim 5 (Canceled)

Claim 6 (Canceled)

Claim 7 (Withdrawn): A modified starch as claimed in Claim 2, wherein
the modified starch is dissolved or dispersed into a water based solvent.

Claim 8 (Canceled)

Claim 9 (Canceled)

Claim 10 (Canceled)

Claim 11 (Canceled)

Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Withdrawn): A method of preparing a starch coating film, which
method comprises forming a coating film onto a substrate by use of a coating
material containing the curable starch composition comprising a mixture of a
starch and a curing agent having a functional group complementally reactive with

at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 2.

Claim 15 (Withdrawn): A method of preparing a starch adhesive film, which method comprises forming an adhesive film onto a substrate by use of an adhesive material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 2.

Claim 16 (Withdrawn): A method of preparing a starch printing film, which method comprises forming a printing film onto a substrate by use of a printing material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 2.

Claim 17 (Withdrawn): A method of preparing a sheet, which method comprises forming a sheet by use of a sheet material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 2.

Claim 18 (Withdrawn): A method of preparing a laminate, which method comprises laminating by use of a laminate material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 2.

Claim 19 (Withdrawn): A method of preparing a molded product, which method comprises molding by use of a molding material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 2.

Claim 20 (Withdrawn): A coated article obtained by the method as claimed in Claim 14.

Claim 21 (Withdrawn): An adhesive article obtained by the method as claimed in Claim 15.

Claim 22 (Withdrawn): A printed article obtained by the method as claimed in Claim 16.

Claim 23 (Withdrawn): A sheet article obtained by the method as claimed in Claim 17.

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Claim 24 (Withdrawn): A laminate article obtained by the method as claimed in Claim 18.

Claim 25 (Withdrawn): A molded article obtained by the method as claimed in Claim 19.

Claim 26 (Canceled)

Claim 27 (Canceled)

Claim 28 (Canceled)

Claim 29 (Withdrawn): A modified starch as claimed in Claim 27, wherein the modified starch is dissolved or dispersed into a water based solvent.

Claim 30 (Canceled)

Claim 31 (Canceled)

Claim 32 (Canceled)

Claim 33 (Canceled)

Claim 34 (Canceled)

Claim 35 (Canceled)

Claim 36 (Withdrawn): A method of preparing a starch coating film, which method comprises forming a coating film onto a substrate by use of a coating material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch

selected from modified starches as claimed in Claim 35.

Claim 37 (Withdrawn): A method of preparing a starch adhesive film, which method comprises forming an adhesive film onto a substrate by use of an adhesive material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 35.

Claim 38 (Withdrawn): A method of preparing a starch printing film, which method comprises forming a printing film onto a substrate by use of a printing material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 35.

Claim 39 (Withdrawn): A method of preparing a sheet, which method comprises forming a sheet by use of a sheet material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 35.

Claim 40 (Withdrawn): A method of preparing a laminate, which method comprises laminating by use of a laminate material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claims 35.

Claim 41 (Withdrawn): A method of preparing a molded product, which method comprises molding by use of a molding material containing the curable starch composition comprising a mixture of a starch and a curing agent having a functional group complementally reactive with at least one hydroxyl group contained in a starch molecule, or a modified starch selected from modified starches as claimed in Claim 35.

Claim 42 (New): A modified starch obtained by reacting the hydroxyl group in a starch with vinyl acetate and at least one aliphatic compound selected from vinyl laurate, vinyl stearate, lauric acid chloride and stearic acid chloride respectively in the presence of an acylifying or esterifying catalyst in a non-aqueous organic solvent to substitute the hydroxyl group with the aliphatic group.

Claim 43 (New): A modified starch as claimed in claim 42, wherein the hydroxyl group in the molecule is further reacted with at least one reactive compound having a functional group complementally reactive with the hydroxyl

group in the starch selected from radically polymerizable unsaturated group-containing compound, a polycarboxylic acid anhydride, an unsaturated fatty acid and a blocked polyisocyanate, a reactive group substitution degree being in the range of 0.01 to 2.5.

Claim 44 (New): A heat-curable coating composition comprising (1) the modified starch as claimed in claim 42, a heat-curable hydroxyl group-containing resin and a curing agent, or (2) the modified starch as claimed in claim 42 and a curing agent.

Claim 45 (New): A heat-curable coating composition comprising a modified starch obtained by reacting the hydroxyl group in the starch with vinyl acetate, vinyl laurate or lauric acid chloride and polycarboxylic acid anhydride as claimed in claim 43, and a curing agent.

Claim 46 (New): A photo-curable coating composition comprising a modified starch obtained by reacting the hydroxyl group in the starch with vinyl acetate, vinyl laurate or lauric acid chloride and the radically polymerizable unsaturated group-containing compound as claimed in claim 43.

Claim 47 (New): A cold-curable coating composition comprising a modified starch obtained by reacting the hydroxyl group in the starch with vinyl acetate, vinyl laurate or lauric acid chloride and the unsaturated fatty acid as claimed in claim 43, and a catalyst.

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Claim 48 (New): A heat-curable coating composition comprising a modified starch obtained by reacting vinyl acetate, vinyl laurate or lauric acid chloride and the blocked polyisocyanate as claimed in claim 43.